AMENDMENTS TO THE SPECIFICATION

Please amend the specification by replacing the original paragraph at page 10, lines 5-19, with the following amended paragraph:

Fig. 2 illustrates in somewhat greater detail the type of cross-referencing data made available to clients ~~20,~~ 22~~, 24,~~ and ~~30~~ other components through database server 28. The database entries, designated generally by reference numeral 40 in Fig. 2, will include cross-referenced information, including patient data 42, references to specific studies or examinations 43, references to specific procedures performed 44, references to anatomy imaged 45, and further references to specific image series 46 within the study or examination. As will be appreciated by those skilled in the art, such cross-referenced information may include further information regarding the time and date of the examination and series, the name of diagnosing, referring, and other physicians, the hospital or department where the images are created, and so forth. The database will also include address information identifying specific images, file names, and locations of the images as indicated at reference numeral 48. Where the PACS includes various associated memory devices or short term storage systems, these locations may be cross-referenced within the database and may be essentially hidden from the end user, the image files simply being accessed by the system for viewing from the specific storage location based upon cross-referenced information in the database.

Please amend the specification by replacing the original paragraph at page 15, line 27 – page 16, line 20, with the following amended paragraph:

Referring to Figs. 7 – 12, each compression code table, such as table 170 in Fig. 7, comprises a series of compressed data values 172 cross-referenced to original image parameters 174. In the example illustrated in the Figs. 7-12, analysis may include an indication of the resulting code links in bits, as indicated by reference numeral 176, and the span of code translated by each table entry, as indicated by reference numeral 178. In the illustrated embodiment, the compressed data code of column 172 translates difference values of column 174 as identified by application of predictors in the compression routine, followed by determination of the differences between the predicted and actual values. Thus, by way of example, where a difference value of 1 is identified based upon a predictor algorithm as described below, table 170 provides a compressed data code of 100. Again, it should be noted that the difference value does not generally represent the value of the encoded pixel itself, but a difference between a predicted value and an actual value. Thus, in a code length of 3 bits, summarized in column 176 of table 170, the pixel of interest differing from the predicted value by 1 will obtain a compressed data value of 100, although the pixel value itself may be considerably longer. As also may be seen in Fig. 7, the compressed data codes provided in column 172 may be summarized as including a first portion 180 designating the level within the table, followed by a second portion 182 which indicates the position within the level or range. Thus, for example, in the case of the table of Fig. 7, a difference range of from –2 to –3 would be encoded as 1101 followed by an additional bit set to a value of 0 or 1 depending upon whether the difference is –2 or –3. At an upper limit of the range, the compressed data code is taken to be the actual value of the individual pixel as described below with reference to Fig. 13.

Please amend the specification by replacing the original paragraph at page 16, line 22 – page 17, line 6, with the following amended paragraph:

As can be seen from the Figs. 7-12, the compression code tables for translating prediction errors or differences to compressed code are established to provide a range of coding appropriate to the levels or variations in the difference values for each subregion of the data stream. Specifically, table 170 of Fig. 7 is adapted to a lowest entropy level as indicated by the low difference variation (zero) accommodated by the shortest code in the table and the relatively fine steps between the difference levels. Fig. 8 represents a second compression code table 184 providing for relatively higher entropy as indicated by the relatively broader maximum levels accommodated by the table and the relatively higher difference ranges as compared to table 170 of Fig. 7. Figs. 9, 10, 11 and 12 provide additional examples of compression code tables 186, 188, 190 and 192, respectively, for encoding successively higher entropy levels as indicated by prediction errors or differences within the various subregions. In the present embodiment illustrated, the code tables are constructed using a Huffman code-based prefix and a multibit extension.